UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,792	08/04/2003	Michael W. Zollers	P00806-US-00	6905

31835 7590 12/15/2004

RUSSELL E. FOWLER, II
ICE MILLER
ONE AMERICAN SQUARE, BOX 82001
INDIANAPOLIS, IN 46282-0002

EXAMINER	
HAN, JASON	

ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,792	ZOLLERS, MICHAEL W.	
	Examiner	Art Unit	
	Jason M Han	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The following claims have been rejected in light of the specification, but also rendered the broadest interpretation [MPEP 2111].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Albou (U.S. Patent 6123440).

2. With regards to Claim 13, Albou discloses an automobile headlamp including:

- a light source [Figure 1: (101)];
- a reflector [Figure 1: (102)] positioned to reflect light from the light source, wherein the light emitted from the reflector appears to emit from a virtual focus [Figure 1: (101')];
- a means [Figure 1: (103)] for collimating the light emitted from the light source and reflected off the reflector, the means for collimating light including a first focal point at the light source [Figure 1: (F1)] and a second focal point [Figure 1: (F2)] at the virtual focus.

3. With regards to Claim 14, Albou discloses the shape of the reflector being hyperbolic [Column 3, Line 13].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter (U.S. Patent 1393573) in view of Albou (U.S. Patent 6123440).

5. With regards to Claim 1, Ritter discloses a headlamp that includes:

- a light source [Figure 1: (L)];
- a reflector [Figure 1: (A)] positioned to reflect light from the light source; and
- a lens [Figure 1] positioned to receive the light emitted from the light source and light reflected off the reflector, wherein a first portion [Figure 1: (b)] and a second portion [Figure 1: (B)] are defined to have a focal point defined at the light source [Figure 1: (L)].

Ritter does not specifically teach the second portion of the lens having a focal point at a virtual focus of the reflector.

Albou teaches a lighting device for an automobile that has a light source, a reflector, and a convergent lens positioned in front of the reflector in order to form an illuminating light beam, wherein the light source is located at an internal focus of the

reflector and whereby the convergent lens has a virtual focus positioned behind the reflector [Figures 1-3; see Abstract].

It would have been obvious to modify the headlamp of Ritter to incorporate the virtual focus of Albou to produce a desired effect with respect to the light beam. Such a configuration is a matter of optics and design preference, whereby a simple multifocal convergent lens may be used to produce a desired optical effect. Albou provides corroboration for such optical configurations, "According to another embodiment, not shown, of the lighting device, provision can be made for the convergent lens to be a toric lens so as to provide a certain horizontal spread of the light beam formed. Provision can also be made for the reflector to be serrated in a roughly vertical direction in order to obtain the horizontal spread of said illuminating light beam formed by the lighting device [Column 1, Line 66 – Column 2, Line 5]."

6. With regards to Claim 2, Ritter in view of Albou discloses the claimed invention as cited above. In addition, Albou teaches the reflector being of a hyperbolic type [Column 3, Line 13].

7. With regards to Claim 3, Ritter in view of Albou discloses the claimed invention as cited above. In addition, Ritter teaches the first portion of the lens being located near the center of the lens [Figure 1: (b)].

8. With regards to Claim 4, Ritter in view of Albou discloses the claimed invention as cited above. In addition, Ritter teaches the second portion of the lens at least partially surrounding the first portion of the lens [Figure 1: (B)].

9. With regards to Claim 5, Ritter in view of Albou discloses the claimed invention as cited above. In addition, Ritter teaches the second portion of the lens being concentric with the first portion of the lens [Figure 1].

10. With regards to Claim 6, Ritter in view of Albou discloses the claimed invention as cited above. In addition, Ritter teaches the first portion of the lens being integral with the second portion of the lens such that the lens is a unitary piece [Figure 1].

11. With regards to Claim 7, Ritter in view of Albou discloses the claimed invention as cited above. In addition, Ritter teaches both first and second portions of the lens collimating light emitted from the light source [Figure 1: (G, H)] and Albou teaches light being reflected off the reflector and collimated by the convergent lens [Figure 1: (i^S)]. Such a configuration is an obvious consequence of the rejection for Claim 1, whereby collimation is the desired optical effect, and thus a matter of design preference.

12. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albou (U.S. Patent 6123440) in view of Rühle (U.S. Patent 3004470).

13. With regards to Claim 8, Albou discloses an automotive lamp providing:

- a light source [Figure 1: (101)], a reflector [Figure 1: (102)], and a lens [Figure 1: (103)]; and
- whereby energizing the light source in such a way that light is emitted from the light source and reflected off the reflector, thereby causing the light to pass through the lens and provide a substantially collimated beam of light [Figure 1: (i^S)].

Albou does not specifically teach a bifocal lens, whereby the lens has a first portion with a focal point at the light source and a second portion with a focal point at a virtual focus of the reflector.

Rühle teaches a multiple focus length lens wherein a first portion [defined by the step lens (S) corresponding to the broken line (I)] has a focal point [Figure 1: (F1)] and a second portion [defined by the step lens (S) corresponding to the broken line (II)] has a different focal point [Figure 1: (F2)]. Each focal point may subsequently be established at a predetermined distance from the lens [Column 3, Lines 13-37].

It would have been obvious to modify the bifocal headlamp of Albou to incorporate the multifocal lens of Rühle to produce a desired effect with respect to the light beam. Such a configuration is a matter of optics and design preference, whereby a simple multifocal convergent lens may be used to produce a desired optical effect. Albou provides corroboration for such optical configurations, "According to another embodiment, not shown, of the lighting device, provision can be made for the convergent lens to be a toric lens so as to provide a certain horizontal spread of the light beam formed. Provision can also be made for the reflector to be serrated in a roughly vertical direction in order to obtain the horizontal spread of said illuminating light beam formed by the lighting device [Column 1, Line 66 – Column 2, Line 5]." In addition, Rühle's lens provides a vehicle with a substantially thin lens [Figure 1].

14. With regards to Claim 9, Albou in view of Rühle discloses the claimed invention as cited above. In addition, Albou teaches the reflector being hyperbolic in shape [Column 3, Line 13].

15. With regards to Claim 10, Albou in view of Rühle discloses the claimed invention as cited above. In addition, Rühle teaches the first and second parts of the bifocal lens being integral to form a unitary piece [Figure 1: (S)].

16. With regards to Claim 11, Albou in view of Rühle discloses the claimed invention as cited above. In addition, Albou teaches a lighting device for an automobile headlight [see Title].

17. With regard to Claims 11-12, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ2d 1647 (1987).

18. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albou (U.S. Patent 6123440) as applied to Claim 13 above, and further in view of Ritter (U.S. Patent 1383573).

19. With regards to Claim 15, Albou discloses the claimed invention as cited above. In addition, Albou discloses the headlight unit having two focal points [Figure 1: (F1, F2)], but does not specifically teach the means for collimating the light being a bifocal lens including a first portion and a second concentric portion.

Ritter teaches a lens [Figure 1] positioned to receive a light emitted from a light source and light reflected off a reflector, wherein a first portion [Figure 1: (b)] and a second concentric portion [Figure 1: (B)] are defined.

It would have been obvious to modify the bifocal headlamp of Albou to incorporate the lens of Ritter to produce a desired effect with respect to the light beam.

Such a configuration is a matter of optics and design preference, whereby a multifocal convergent lens may be used to produce a desired optical effect. Albou provides corroboration for such optical configurations, "According to another embodiment, not shown, of the lighting device, provision can be made for the convergent lens to be a toric lens so as to provide a certain horizontal spread of the light beam formed. Provision can also be made for the reflector to be serrated in a roughly vertical direction in order to obtain the horizontal spread of said illuminating light beam formed by the lighting device [Column 1, Line 66 – Column 2, Line 5]." In addition, Ritter's invention provides a means for reducing the glare from headlamps without reducing the intensity of the illuminating beam [Column 1, Lines12-19], which is a claimed benefit of applicant's invention [Page 1, Line 20-22].

20. With regards to Claim 16, Albou in view of Ritter discloses the claimed invention as cited above. In addition, Ritter teaches the first portion of the lens being integral with the second portion of the lens such that the lens is a unitary piece [Figure 1].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references have been cited to further show the state of the art pertinent to the current application, but may not be exhaustive:

US Patent 1348618 to Zorger;

US Patent 1366946 to Rolph;

US Patent 1410077 to Peck;

US Patent 1416444 to Bugbee;

US Patent 1751070 to Boots et al;

US Patent 2556328 to Hinds;

US Patent 2738414 to Davis et al;
US Patent 3941459 to McFarland et al;
US Patent 4209825 to Shackelford;
US Patent 4210391 to Cohen;
US Patent 4636211 to Nielsen et al;
US Patent 4787722 to Claytor;
US Patent 4814950 to Nakata;
US Patent 4859043 to Carel;
US Patent 4959757 to Nakata;
US Patent 4993807 to Sakakibara;
US Patent 4995715 to Cohen;
US Patent 5349471 to Morris et al;
US Patent 5442488 to Pastorino;
US Patent 5446565 to Komma et al;
US Patent 5685631 to Dobert et al;
US Patent 5715031 to Roffman et al;
US Patent 5808775 to Inagaki et al;
US Patent 5897196 to Soskind et al;
US Patent 5899559 to Lachmayer et al;
US Patent 5924788 to Parkyn, Jr.;
US Patent 5986779 to Tanaka et al;
US Patent 6007210 to Yamamoto et al;
US Patent 6070993 to Natsume;
US Patent 6250777 to Aoyama;
US Patent 6264347 to Godbillion et al;
US Patent 6273591 to Albou;
US Publication 2002/0024822 to Pond et al;
US Publication 2002/0034080 to Tamai;
US Patent 6485170 to Natsume;
US Publication 2002/0196639 to Weidel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (12/6/2004)

JOHN ANTHONY WARD
PRIMARY EXAMINER